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February 1, 2002

To: Governor Gray Davis

President of the California Senate Pro Tem

Speaker of the California Legislature

Subject **Comments on California Power Authority Draft Plan and Urgent recommendations for a California Energy Plan based on revenue producing ventures**

Dear Mr. Governor, State Senators, and State Legislators

Purpose: The purpose of this letter is to provide comments on the Draft Proposal for Funding the California Power Authority. (CPA). Public comments have been requested, public meeting held, and comments requested over the internet. I am submitting written comments by February 1, and expect that they will be included with the report to the Governor and the Houses of the State Legislature.

I plan to appear, perhaps with others representing organizations that may endorse these comments, at the February 8, 2002 Final CPA comment meeting to verbally present, and underline the significance of some of these comments and recommendations in this letter.

<u>EXECUTIVE SUMMARY.</u> **The points addressed in this letter can be summarized as follows:**

1.• **Financial Plan is merely a fatally flawed stopgap measure unless there are other reforms.** Approving CPA financing is a stopgap measure at best, without further reform of the California Electric Power and natural gas markets to correct the errors of de-regulation, and to make long range plans for California's energy future.

2. **Major defects of the CPA Plan.** The major defects of the CPA plan are as follows:
   - **There is no revenue stream to amortize the CPA bonds or the Bonds of the other lenders.** The plan is not clear on how entities that receive grants or below market rate loans repay the agency.

- **Propose to finance from the California Teachers Retirement fund, and the proponents of the CPA approach will receive a scathing blast from the trustees,** underlining the defect.
- **Propose financing the $5 Billion from the State employees retirement program,** and these trustees will point out there is no revenue stream except annual payments from the general fund to amortize the bonds.
- **Having lost the ability to tax utility rates for such schemes,** the proponents appear to have cleverly designed a scheme to tap the California General Fund.

• If the conservation and green energy approach is sufficiently noble, **it should be paid for by direct annual expenditures from the General Fund, or by Tax credits to various special interest, which is a politically more attractive way to proceed. General Obligation Bonds should not be floated.**

• **The CPA market forecast of reserve margin is shaky at best.** Under de-regulation no one knows what future events will occur that will result in the export of power from California, despite the presence of capacity. If commitments for long term purchase are made to "tie up" the necessary capacity for the high forecast, then the situation we face summer 2002 and in future years is likely to pertain. We will buy when power is at high prices, and sell low, when we find we have missed the forecast, and have surpluses due to economic downturns or unforeseen weather. The cost of the forward purchase scheme, implemented in fall 2000 through to spring 2001, according to press reports will cost $4 Billion in 2002 alone, as long-term contracts must be sold at a loss.

The CPA market forecast apparently has no provision for growth in demand for new technology distributed generation technology, nor does it contemplate the changes in infrastructure necessary to bring into being the battery powered and fuel cell powered automobile.

• **The plan deals too glibly with the natural gas transmission issue.** I believe a more careful study than the one cited, with a different set of assumptions and premises, would reveal the following:
- **Under de-regulation NO ONE has the incentive to provide facilities to store natural gas for unforeseen increases in demand, or unforeseen disruption in supply, due to breakage of a pipeline by earthquake or sabotage.** Although it is entirely financially affordable, costing about 5% of plant capital cost to provide 6 weeks to 2 months storage of natural gas, at each power plant, no regulation is enforcing this prudent policy objective. Instead merchant power

vendors are seeking to exploit the last drop of capacity built into the energy infrastructure during the previous regulated era.

- **There is no effective regulation of gas transmission. FERC lacks staff and will power,** to control the monopoly power held by the half *dozen intra-state gas pipeline companies.* The *monopoly holders* have every incentive to maintain a shortage, or barely enough capacity, when surplus capacity is necessary if there is to be any chance of competition among suppliers.
- **There is no planning for the infrastructure of distributed generation. DG** is a fuel cell technology that permits a small user of electric power to convert natural gas to electric power, and to heat hot water and provide heating and air condition for the business.

- **Vendors of existing electric power** appear to be using the lack of natural gas transmission capacity to strangle, i.e. to delay the introduction of a new technology that may reduce there markets and cap their prices. A 10 KW user cannot expand gas transmission lines. An owner of multiple 500 MWE power plant can build a major transmission line suitable for multiple plants and retail customers for $200 to $300 Million, a fraction of the cost of one plant. He has no incentive under de-regulation to do this. **Apparently CPA does not intend to disrupt the cozy nest of the present monopolists.**

3.• **Return to Regulation is Mandatory.** A return to electric power and natural gas regulation by a state PUC is absolutely essential. To do otherwise requires even greater amounts of regulatory changes, than a return to the pre 1996 system, the elements of which are clear and well proven. **Otherwise, this financial package will just be the first annual or biannual raids on the General Fund of the State of California.**

3A.• **Why the return to Regulation is the best and simplest solution.** The energy entrepreneur must perform several tasks, not required of the regulated utility, that add to his costs when his demand forecast is wrong, and his risks thereby increasing his cost of capital. The energy trader brings no commensurate benefit to natural gas and electric power users, and other stakeholder groups.

The **ENRON BANKRUPTCY** is just the most recent of many "wakeup calls" that confirm the inherent weakness of the so-called "free " de-regulated energy Market. The pattern of abuses go back to the 1920's and 30's which finally resulted in the Public Utility Holding Company Act of 1934, the structure until recently of the electric power industry. The PUHCA prevented the costs and abuses, which recently sunk Enron, and which Enron successfully lobbied to eliminate

3B.• **Repairing a broken system is a must. Replacement with a better system will partially justify the major losses to date.** The California public is greatly over paying for the emergency relief provided by the Governors Actions in summer of 2000 and later, which avoided blackouts in 2001. **The public will be at least partially reimbursed for this massive waste of public funds, if lessons are learned, if the deficiencies in 1996 AB1894 (deregulation) are remedied, and a California Energy Plan that addresses the long-term needs of the State is crafted.** Will we heed the wakeup calls? If not, these payments are just the first of multiple payments reaching far into the future that will guarantee California energy continues to be the highest priced in the nation.

4• **How quickly the legislature and governor Act depends in part on how contentious are the analysis and recommendations.** A major part of the cure is a return to a system that has worked well for over 65 years, regulation by a PUC. We don't need to buy a pig in a poke. We can avoid the mistakes that made California electric power the highest cost in the nation, by refusing to tax electric power for general societal benefits, however noble. The electric tax for social goals that don't generate a revenue stream leads to big consumers of electric power wanting to "opt out." They "opt" out either by moving jobs out of state, or by building private generation that does not share the cost of the grid or pay the taxes built in to the rate base. This leads to the vicious circle of spiraling costs, further departures, etc.

A state public agency to finance and provide part of the infrastructure demanded for the 2010 transition electric cars powered by batteries and fuel cells, is more argumentative, but in my opinion, that of many experts and myself fully justified.

The risk of the transition to the battery and fuel cell powered vehicle are bigger than auto makers and fuel cell suppliers can finance. A large player is required to make the major capital investments required. This is an appropriate role for CPA, that meets the charter, in part because it positions California for a new era of prosperity, not built on defense like the 1950-60's and 70's, and not built on semi conductor technology per se. Instead we position California to be the leader in the new electric transportation technology and infrastructure.

4A.• **What are the alternatives repair the California governing regulations?** Under any of the options a return to regulation by the state PUC is the first step. The options and discussion will revolve around who are the suppliers, and the role of the state.

- **Option 1: CPA persists for a time and then phases out. Returning to three major suppliers of electric power.**
- **Option 2: CPA take over the entire electric and natural gas market of California, buying out SCE and PG&E, and taking over LADWAP as the nucleus of CPA.**
- **Option 3: The Public Private Option CPA, LADWAP, SCE, PGE, SDG&E with CPA primarily responsible for the energy infrastructure growth, particularly the long term financing need for generation and transmission to accomplish the transition to electric cars, powered at first by batteries**

(electricity) and fuel cells (natural gas) and later by an infrastructure of hydrogen as an energy supply, coupled to the above.

4B.• **Can we unscramble the egg, resulting from De-Regulation? Yes**, we already have a public power agency that is a major California Energy Supplier, Los Angeles District of Water and Power. (LADWAP). It can be a prototype for the **California Power Authority. (CPA).** PG&E, SCE, and SDG&E can continue as private entities in their pre 1996 roles. What about the relief promised to various parties in 1996. Not all of it can be realized depending on the organization infrastructure finally approved for the plan.

None of the existing power suppliers have anything to fear from loss of market share and loss of economy of scale to CPA, except during the transition back from de-regulation to regulation and the restoration of equilibrium in the gas and electric markets by the CPUC. They will ultimately share in the increased business as the electric automobile is introduced and the infrastructure to support the electric car is enabled by CPA but implemented in the territories of LADWAP, PG&E, SCE, and SDG&E, by these public or private companies.

5.• **Merit of a California Energy Plan.** Such an energy plan is a potential model for the USA. California as the 6th largest world economy has both the technological resources, the need to make a change because the de-regulated system is broken, and the capability within the state for essentially everything that is needed.

- California can gain competitive advantage in the electric powered automobile business which builds on Silicon Valley technology
- California can gain jobs and experience in implementing the new energy infrastructure that gives us a competitive advantage that provides jobs and technological leadership for another two decades.
- The plan builds on the capabilities of several California Energy Companies including General Electric Nuclear Power Division, Bechtel Architect Engineers, and General Atomic with the high temperature gas reactor, and numerous Silicon Valley companies that can provide the heart of the new automobile machine, much more effectively than Detroit.

5A.• **Benefits for major California Stakeholder.**

- **Electric power users-** lower more stable cost based power rates.
- **Energy intensive California businesses-** lower more stable, cost based rates that don't incentivize dropping out of the grid for self generated power.
- **Environmental Groups-** The electric automobile powered by fuel cells has been pushed by the Rocky Mountain Institute and Amory Lovins. The ability to store energy from Solar and Wind energy in propulsion power for vehicles, either battery charge or hydrogen will improve the economics.

- **Nuclear Power-** There will be a major role for nuclear power after a period of transition. Initially use of fossil fuel in more efficient ways will slow the effects of global warming. Eventually **the fuel cell powered by hydrogen based fuel produced by nuclear energy** will far more environmentally preferred emitting no CO2 for global warming, and will be strongly supported by the thinking part of the environmental community.
- **State legislators.** The legislature will earn well deserved credit by establishing the plan for fixing the current California energy problem, and coming up with a better system than the one overturned by the legislature in AB1984 in 1996.
- **Unions-**jobs in power plant, infrastructure, and new automobile
- **Teachers-eliminate a major drain on the General Fund by restructuring and solving the AB1894 mess.**
- **Doctors and Lawyers.-** A prosperous California with a growing job market
- **Silicon Valley Manufacturing Group-** The hydrogen-powered automobile can make the internal combustion engine and obsolete **in the same way that the digital watch nearly eliminated the Swiss Watch business.**

5B• Financing and construction of energy producing assets is preferred to the approach recommended in the CPA Plan. The conservation and green energy savings addressed by the plan can best be accomplished by Income Tax credits, or by grants paid for in the current tax year. Borrowing money to accomplish various societal goals, whether for national defense, universal medical care, education, however worthy the purpose, has a fundamental defect.

The defect is that the cost of repaying the borrowing with interest, however noble the purpose, becomes a reason for latter generations to "Opt Out" of the process. There are numerous examples.

- The defense build up of the 1980's however well justified, was financed by borrowing from future generation retirement funds. People have not opted out, because the U.S. still has on balance the best economic growth rate and the lowest taxes. But that could change. Unless the money is repaid with interest, the cost of the Defense Build up that crumbled the Russian Empire, a noble societal goal, will be paid for by reduced retirement benefits of our children, and extremely onerous tax rates for reduced benefits.
- California utility rates became the highest in the nation, because the costs of various societal goals, prototype solar and wind power, costs of delay to nuclear generation, and others were built into the rate base. Revenue to repay the costs resulted in high cost of power, and every economic incentive to "Opt Out" of the California grid by building plants dedicated to particular businesses. By this strategy business could avoid the tax placed on electric power users by earlier non -revenue generating noble social projects.

- One of the few merits of de-regulation is that politically motivated members of the PUC can no longer build in the cost of various non revenue producing environmentally improving or energy conserving schemes into the rate base, however noble the purpose. Under de-regulation there is no way to build in the revenue stream to amortize the bonds, except with some sort of tax from a different source.

  A visible tax on electric power, despite the relief from stranded costs and other measures of the 1996 legislation, would again become so large that the tax would be politically untenable. This is a repeat of what occurred in the 1990's leading to de-regulation. But the proponents of conservation, and renewable energy have proposed that CPA become the vehicle for Financing the next round of such schemes. As things now stand, amortization of the CPA bonds will be paid for by the General Revenues of the state of California. The impact can be hidden more easily in the bigger budget.

- Because of the cumulative effect of compound interest, the non revenue producing social engineering schemes, however noble and well intentioned should be paid for by current year from the State General Fund.

  Income tax credits are a politically more palatable way of transferring the cost of such spending to the General Fund. The tax savings afforded the owner of the energy conserving building must be shared prorata with tax increases to other State taxpayers to maintain the same level of state programs and services, but is a fair pay as you go system.

  Direct expenditure from the General Fund is the "no smoke and mirrors" way of accomplishing the energy conservation, and the transition to a greater amount of conservation and "green" energy. It is my opinion that when the direct costs of either borrowing or annual appropriations are revealed, there will be less public support than indicated in the surveys of the CPA plan, and more support for construction of plant and infrastructure that generate revenue and is self amortizing.

In Summary, please do not confine your attention to financing the actions of the past. This will just be the first of many payments to a flawed system. Correct the problems in energy regulation, and establish a new state energy plan for that meets the future needs of California.

Sincerely,
Original signed by
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